



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

VIA ELECTRONIC MAIL
DELIVERY RECEIPT REQUESTED

Ryan H. Smothers, Owner and/or Operator
Advanced Diesel of Northwest Arkansas, LLC
ryan@advanceddieselar.com

Re: Finding of Violation
Advanced Diesel Solutions, LLC and Advanced Diesel of Northwest Arkansas, LLC
West Harrison, Arkansas

Dear Mr. Smothers:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to Advanced Diesel Solutions, LLC and Advanced Diesel of Northwest Arkansas, LLC (collectively Advanced Diesel or you) for violating Sections 203(a)(3)(A) and (B) of the Clean Air Act (CAA), 42 U.S.C. §§ 7522(a)(3)(A) and (B). As summarized in the attached FOV, EPA has determined that Advanced Diesel has removed and/or rendered inoperative devices or elements of design installed on or in motor vehicles or motor vehicle engines, and has sold, offered to sell, and installed parts or components that bypass, defeat, or render inoperative elements of design of those engines that were installed by the original equipment manufacturer in order to comply with CAA emission standards.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Ethan Chatfield. You may call him at (312) 886-5112 or email him at Chatfield.ethan@epa.gov to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Nathan Frank
Chief, Air Enforcement and Compliance Assurance Section IL/IN

Enclosure: SBREFA fact sheet

cc: Misty Howell
Vinson & Elkins
mhowell@velaw.com

Steve Thompson
U.S. EPA Region 6
thompson.steve@epa.gov

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Advanced Diesel Solutions, LLC and
Advanced Diesel of Northwest Arkansas, LLC
West Harrison, Arkansas**

FINDING OF VIOLATION

EPA-5-20-MOB-09

Proceedings Pursuant to
the Clean Air Act,
42 U.S.C. §§ 7401 et seq.

FINDING OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Finding of Violation to Advanced Diesel Solutions, LLC and Advanced Diesel of Northwest Arkansas, LLC (collectively Advanced Diesel or you) for violating Section 203(a)(3)(A) and (B) of the Clean Air Act (CAA), 42 U.S.C. §§ 7522(a)(3)(A) and (B).

Statutory and Regulatory Background

1. Title II of the CAA was enacted to reduce air pollution from mobile sources. In enacting the CAA, Congress found, in part, that “the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare.” CAA § 101(a)(2), 42 U.S.C. § 7401(a)(2). Congress’s purpose in enacting the CAA included “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population,” and “to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution.” CAA § 101(b)(1)–(2), 42 U.S.C. § 7401(b)(1)–(2).
2. Section 216(2) of the CAA defines “motor vehicle” as “any self-propelled vehicle designed for transporting persons or property on a street or highway.” *See also* 40 C.F.R. § 85.1703 (further defining “motor vehicle”).
3. EPA promulgated emission standards for particulate matter (PM), nitrogen oxides (NO_x), and other pollutants applicable to motor vehicles and motor vehicle engines, including diesel engine vehicles, under Section 202 of the CAA, 42 U.S.C. § 7521. *See* the implementing regulations at 40 C.F.R. Part 86. Diesel engine emission standards “reflect the greatest degree of emission reduction achievable through the application of [available] technology.” CAA § 202(a)(3)(A)(i), 42 U.S.C. § 7521(a)(3)(A)(i).
4. Section 203(a)(1) of the CAA, 42 U.S.C. § 7522(a)(1), prohibits a manufacturer of motor vehicles or motor vehicle engines from selling a new motor vehicle or motor vehicle engine in the United States unless the motor vehicle or motor vehicle engine is covered by a certificate of conformity (COC). EPA issues COCs to motor vehicle and motor vehicle engine manufacturers under Section 206(a) of the CAA, 42 U.S.C. § 7525(a), to certify that a particular group of motor vehicles and motor vehicle engines conform to applicable EPA requirements governing motor

vehicle emissions. The COC will include, among other things, a description of the diesel engines, their emission control systems, all auxiliary emission control devices and the engine parameters monitored.

5. Diesel engine manufacturers employ many devices and elements of design to meet emission standards. “Element of design” means “any control system (i.e., computer software, electronic control system, emission control system, computer logic), and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.” *See* 40 C.F.R. §§ 86.094-2 and 86.1803-01.
6. To meet the emission standards in 40 C.F.R. Part 86 and qualify for a COC, diesel engine manufacturers may utilize control devices or elements of design such as Exhaust Gas Recirculation (EGR), Clean Gas Induction (CGI), Diesel Oxidation Catalyst (DOC), Diesel Particulate Filter (DPF), and/or Selective Catalytic Reduction (SCR) systems.
7. Diesel engine vehicle manufacturers may also employ engine fueling strategies, such as retarded fuel injection timing, as a primary element of design to limit emissions of NO_x. *See* 59 Fed. Reg. 23,264 at 23,418 (May 5, 1994) (“[I]njection timing has a very significant impact on NO_x emission rates, with advanced timing settings being associated with higher NO_x ...”).
8. Modern diesel engine vehicles are equipped with electronic control modules (“ECMs”). ECMs continuously monitor engine and other operating parameters and control the emission control devices and elements of design, such as the EGR, DOC, DPF, and SCR systems and the engine fueling strategy.
9. Under Section 202(m) of the CAA, 42 U.S.C. § 7521(m), EPA promulgated regulations for motor vehicles manufactured after 2007 that require diesel engine motor vehicles to have numerous devices or elements of design that, working together, can detect problems with the vehicle’s emission-related systems, alert drivers to these problems, and store electronically-generated malfunction information. 40 C.F.R. §§ 86.005-17, 86.007-17, 86.1806-05. These devices or elements of design are referred to as “onboard diagnostic systems” or “OBD” systems.
10. Section 203(a)(3)(A) of the CAA prohibits “any person to remove or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under [Title II of the CAA] prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative any such device or element of design after such sale and delivery to the ultimate purchaser.”
11. Section 203(a)(3)(B) of the CAA prohibits “any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under [Title II of the CAA], and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.”

Background

12. Advanced Diesel is an automotive repair shop and diesel engine aftermarket parts retailer and installer located at West Harrison, Arkansas.
13. Advanced Diesel is a “person,” as defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).
14. On May 11, 2020, EPA sent a request for information (Information Request) to Advanced Diesel in accordance with Section 208 of the CAA, 42 U.S.C. § 7542, requesting, among other things, information related to Advanced Diesel’s sale, offer for sale and/or installation of parts, components, and services (products) which bypass, defeat, or render inoperative any emission control component, element of design, or emissions related part or component.
15. On August 10, 2020, EPA received Advanced Diesel’s response to EPA’s Information Request. The response included invoices for products sold and/or installed by Advanced Diesel that bypassed, defeated, or rendered inoperative emission control components and/or elements of design (defeat devices) on customer motor vehicles.
16. The records provided by Advanced Diesel indicate that these ‘defeat devices,’ included tunes, tuners, EGR block plates, and exhaust kits manufactured and/or sold to Advanced Diesel by Diesel Spec Inc., Flo~Pro, GDP Diesel, JAMO, MBRP/P1 Race Parts, MotorOps, and Tuning Tyrant Diesel/Cale Thompson, among others. Advanced Diesel then sold and/or installed these defeat devices on customer motor vehicles equipped with Cummins, Paccar, Maxxforce, Powerstroke, and Detroit Diesel certified diesel engines.
17. The installation of these defeat devices rendered inoperative elements of design installed on or in a motor vehicle or motor vehicle engine and allowed for the removal or rendering inoperative of emission control devices (i.e., EGR, DOC, DPF, and/or SCR system(s)) without illuminating a malfunction indicator lamp in the vehicle’s OBD system, prompting any diagnostic trouble code in the OBD system, or causing any engine derating due to the removal or disabling of an emission control device.
18. The information submitted by Advanced Diesel indicates that between January 1, 2017 and May 11, 2020, Advanced Diesel sold and/or installed at least 407 defeat devices.
19. The parts and/or components manufactured, sold, offered for sale, and/or installed by Advanced Diesel were intended for “motor vehicles” as defined by Section 216(2) of the CAA, 42 U.S.C. § 7550(2). Specifically, the parts and/or components are designed for use on makes and models of diesel-engine motor vehicles for which their respective manufacturers have obtained COCs establishing compliance with CAA emissions standards. Further, Advanced Diesel knew or should have known that these parts and/or components were being used to bypass, defeat, or render inoperative the emission controls on motor vehicles and/or motor vehicle engines certified under the CAA.
20. The CAA does not exempt “off-road use only” or “competition only” motor vehicles or motor vehicle engines. The definitions for motor vehicle at CAA § 216(2); 42 U.S.C. § 7550(2) and 40 C.F.R. § 85.1703 make no exemption for motor vehicles or motor vehicle engines used for

competition.¹ More generally, these definitions are based on vehicle attributes (*e.g.*, ability to travel over 25 miles per hour, lack of features that render street use unsafe) and make no exemption for vehicles based on their use.

Violations

21. EPA finds that Advanced Diesel knowingly removed and/or rendered inoperative the EGR, DOC, DPF, SCR, catalyst, and/or OBD systems and tampered with the emissions-related elements of the ECM installed on or in motor vehicles or motor vehicle engines, in violation of Section 203(a)(3)(A) of the CAA, 42 U.S.C. § 7522(a)(3)(A).
22. EPA finds that Advanced Diesel sold, offered to sell, and/or installed at least 407 parts or components, intended for use with, or as part of, a motor vehicle or motor vehicle engine, where a principal effect of the part or component was to bypass, defeat or render inoperative elements of design that control emissions, such as the EGR, DOC, DPF, SCR, catalyst, OBD systems and/or other elements of design on motor vehicles and motor vehicle engines, and Advanced Diesel knew or should have known that such part or component was being offered for sale or installed for such use or put to such use, in violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B).

Environmental Impact of Violations

23. These violations may result in excess emissions of PM, NO_x, hydrocarbons, and other air pollutants and contribute to increased ground level ozone concentrations. PM, especially fine particulates containing microscopic solids or liquid droplets, can get deep into the lungs and cause serious health problems, including decreased lung function; chronic bronchitis; and aggravated asthma. Additionally, current scientific evidence links short-term NO_x exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Exposure to ground-level ozone can also reduce lung function and inflame lung tissue; repeated exposure may permanently scar lung tissue.

¹ In contrast, the CAA exempts from the definition of “nonroad vehicle” and “nonroad engine” those vehicles and engines used solely for competition. CAA § 216(10)-(11); 42 U.S.C. § 7550(10)-(11). EPA has implemented regulations describing how to exempt from CAA requirements nonroad vehicles and engines used solely for competition. 40 C.F.R. § 1068.235. These regulations explicitly do not apply to motor vehicles and motor vehicle engines. 40 C.F.R. § 85.1701(a)(1).

Enforcement Authority

24. EPA may bring an enforcement action for these violations under its administrative authority or by referring this matter to the United States Department of Justice with a recommendation that a civil complaint be filed in federal district court. CAA §§ 204 and 205, 42 U.S.C. §§ 7523 and 7524. Any person who violates Section 203(a)(3) of CAA, 42 U.S.C. § 7522(a)(3), is subject to an injunction under Section 204 of CAA, 42 U.S.C. § 7523, and a civil penalty of up to \$4,819 for each violation. CAA § 205(a), 42 U.S.C. § 7524(a); 40 C.F.R. § 19.4, Table 1.

Michael D. Harris
Division Director
Enforcement and Compliance Assurance Division